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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,300	07/22/2003	Nicholas Atkins	ATKN101CIP	7878
21658 7590 11/16/2007 DYKAS, SHAVER & NIPPER, LLP P.O. BOX 877 BOISE, ID 83701-0877			EXAMINER NGUYEN, TUAN N	
			ART UNIT 3751	PAPER NUMBER
			MAIL DATE 11/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/625,300

Applicant(s)

ATKINS ET AL.

Examiner

Tuan N. Nguyen

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-9, 11-20 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9, 11-20, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/37/07 have been fully considered but they are not persuasive as follow as set forth in the previous office action and as follow.

Regarding claim 25, the applicant argues that the ridges of Atkins are vertically projecting O-rings, which do not constitute ridges. The projections (165) in Atkins' Fig. 17 are circular projections from a surface; therefore, they are certainly capable of being the equivalent of the applicant's ridges, which are also circular projections from a surface.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-9, 11-20, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/09825 (hereinafter Atkins).

In regard to claims 1, 6, 8, 11, 18 and 22, Atkins discloses a seal (Fig. 6) comprising a generally tubular and substantially resilient body (1) for location between two members to be connected, the body comprising an interior sealing member (about 1A or 53), a deformable lip (52) for abutting one of the members to be connected and having a sealing face (about 52) adapted to form a sealing contact with a surface (40) of the member, the lip being arranged such that the sealing face of the lip would inherently

Art Unit: 3751

deforms by a radially outer portion of the lip rolling in a predictable and "controlled manner" (see the description for Fig. 6 on page 13) when subject to axial compression. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the deformable lip (52) of Fig. 6 with an undercut as for example shown in Figs. 3, 4 and 16 of Atkins, which would obviously provides a generally cylindrical surface profile that is substantially hemicylindrical.

In regard to claims 2 and 3, the body (1) is generally tapered and is generally frustoconical, with an upper portion (1A, 1B) being of greater diameter than the lower portion (1C).

In regard to claim 7, a highest point (about 52) of the lip is positioned radially outward of a mid-point (about 53) of the adjacent body wall (see Fig. 6).

In regard to claim 9, the body (1) further comprises a shoulder (54) located spaced from the lip (52), for spacing the lip from the second member to be connected.

In regard to claims 12 and 13, the above lip would inherently comprise friction-increasing formations thereon since it is made of elastomeric material.

In regard to claims 16 and 17, the above body further comprises a sealing portion having protrusion (22A, 22B) on an outer surface of a body wall for forming a seal between the body and the second member to be connected.

In regard to claim 20, the interior sealing member (about 1A or 53) would inherent deform when subject to force exerted by a member to be connected since the seal is made from elastomeric material.

In regard to claim 24, the lip is certainly capable of being deformed without buckling in a similar manner as that of the applicant's lip.

In regard to claims 14, 15 and 25, although the Atkins lip does not include ridges thereon extending substantially circumferentially around the lip as claimed, attention is directed to Fig. 17 of Atkins, which discloses an analogous seal which further includes a lip (167) having ridges (define by 165) thereon extending substantially circumferentially around the lip to increase the sealing effect with the abutting member (see page 18, line 26 et seq.). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ, on the seal of Fig. 6 of Atkins, ridges as, for example, taught by Fig. 17 of Atkins in order to increase the sealing effect with the abutting member.


In regard to claim 19, although the Atkins interior sealing member does not include a diaphragm extending radially within the body as claimed, attention is directed to Fig. 18 of Atkins, which discloses an analogous seal which further includes an interior sealing member (176) that is a diaphragm extending radially within the body. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ, on the seal of Fig. 6 of Atkins, the diaphragm sealing member as, for example, taught by Fig. 18 of Atkins in order to increase the sealing effect with the abutting member.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to [redacted] whose telephone number is 571-272-4892. The examiner can normally be reached on Monday-Friday (10:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tuan Nguyen
Primary Examiner
Art Unit 3751

TN